



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

ES

| APPLICATION NO.                                                             | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/660,086                                                                  | 09/11/2003  | David W. Schneider   | 14265               | 5908             |
| 7590                                                                        | 11/29/2004  |                      | EXAMINER            |                  |
| Sally J. Brown<br>AUTOLIV ASP, INC.<br>3350 Airport Road<br>Ogden, UT 84405 |             |                      | HUYNH, LOUIS K      |                  |
|                                                                             |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                             |             |                      | 3721                |                  |

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|------------------------------|------------------------|---------------------|--|
|                              | 10/660,086             | SCHNEIDER ET AL.    |  |
| Examiner                     | <b>Art Unit</b>        |                     |  |
| Louis K. Huynh               | 3721                   |                     |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 11 September 2003.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-68 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-68 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 11 September 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All   b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/11/03.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 18-21 are objected to under 37 CFR 1.75 as each being a respective exact duplicate of claims 10-13. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 7-21, 30-32 and 34-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Fisher et al. (US 5,730,460).

With respect to Claims 1-5, 14, 30-32 and 41, Fisher discloses a method of folding an air bag including the steps of: providing an air bag having a throat (51), window face, occupant face, first (59) and second (60) lateral sides, and an end (61); flattening the window face and the occupant face of the air bag; folding/tucking the first (59) and the second (60) lateral sides of the air bag inwardly along fold lines A and B to a desired width by flattening the first and second sides against a face of the air bag (FIG. 5B); and contraction folding the air bag from the end

(61) toward the throat (51) (FIGS. 5C & 5D). Note that: a) the air bag of Fisher is symmetrical and both the window face and the occupant face are made of the same material, thus the window face can also be used as the occupant face and vice versa; b) the claimed “overhead air bag” of claims 2, 30 and 41 is not structurally different from the air bag used in the method of Fisher; therefore, it does not patentably distinguish the claimed invention from the applied prior art. Furthermore, there is nothing that precludes the air bag of Fisher to be used as an overhead air bag; and c) tucking is taken as pulling up into a fold (Webster’s Collegiate Dictionary) and thus tucking is considered to be the same as folding.

With respect to Claims 7-9, 15-17, 34-36 and 42-44, the step of contraction folding in the method of Fisher includes rolling the air bag from the end (61) toward the throat (51) (FIG. 5C). Note that the air bag of Fisher is symmetrical and both the window face and the occupant face are made of the same material, thus the window face can also be used as the occupant face and vice versa.

With respect to Claims 10, 18, 37 and 45, the step of contraction folding in the method of Fisher includes accordion folding the air bag from the end (61) toward the throat (51) (FIG. 5D).

With respect to Claims 11-13, 19-21, 38-40 and 46-48, the step of contraction folding in the method of Fisher includes a combination of wrap folding and accordion folding the air bag from the end (61) toward the throat (51) (FIG. 5D). Note that the air bag of Fisher is symmetrical and both the window face and the occupant face are made of the same material, thus the window face can also be used as the occupant face and vice versa.

4. Claims 1-8, 10-12, 14, 30-35, 37-39, 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Igawa (US 6,196,585).

With respect to Claims 1-5, 14, 30-32, 41, Igawa discloses a method of folding an air bag including the steps of: providing an air bag (1) having a throat (1a), a windshield face, an occupant face, first and second lateral sides, and an end (1b); flattening the windshield and the occupant faces of the air bag (Fig. 1A); folding the first and second lateral sides to a desired width by tucking the first and second side inwardly between the windshield face and the occupant face (Figs. 1C-1H); flattening the tucked first and second lateral sides between and against the windshield face and the occupant face (Fig. 1I); and contraction folding the air bag from the end (1b) toward the throat (1a) (Fig. 1J). Note that the claimed “overhead air bag” of claims 2, 30 and 41 is not structurally different from the air bag used in the method of Igawa; therefore, it does not patentably distinguish the claimed invention from the applied prior art. Furthermore, there is nothing that precludes the air bag of Fisher to be used as an overhead air bag.

With respect to Claims 6, 33 the step of folding the first and second lateral sides inwardly produces overlaps (Fig. 1H).

With respect to Claims 7, 8, 15, 16, 34, 35, 42 and 43, the step of contraction folding in the method of Igawa includes rolling the air bag on the windshield face from the end (1b) toward the throat (1a) (Fig. 2A).

With respect to Claims 10, 18, 37 and 45, the step of contraction folding in the method of Igawa includes accordion folding the air bag on the windshield face from the end (1b) toward the throat (1a) (col. 5, lines 36-42; Fig. 1J).

With respect to Claims 11, 12, 19, 20, 38, 39, 46 and 47, the step of contraction folding in the method of Igawa includes accordion folding a portion of the air bag and wrap folding a remaining portion of the air bag and the folding is conducted toward the windshield face (col. 5, lines 46-50; Figs. 1J & 1K).

5. Claims 1-4, 6-8, 10-12, 14-16, 18-20, 22-26, 28, 30, 31, 33-35, 37-39, 41-43, 45-47, 49, 50, 52, 53, 55-57, 59, 60, 62, 63 and 65-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Lunt et al. (US 5,694,737).

With respect to Claims 1-3, 5, 6, 14, 22-24, 30-32, 41, 49, 50, 59 and 60, Lunt discloses a method of folding an air bag including the steps of: providing an air bag (50) having a throat (66), windshield face (62), occupant face (70), a head region (68a/70a), first and second lateral sides, and an end (tip of lower portion 68b or 70b); flattening the windshield face (62) and the occupant face (70) of the air bag (FIGS. 4 & 5); folding the head region (68a/70a) by flattening the head region against the occupant face (70) (FIG. 6 & 7); folding/tucking the first and the second sides of the air bag inwardly along edges 84a and 84b of clamping blade 84 to a desired width by flattening the first and second sides against the windshield face (62) of the air bag and producing an overlap of one lateral side over the other lateral side (FIGS. 12 & 13); and contraction folding the air bag from the end of the air bag toward the throat (66) of the air bag (FIGS. 14-27). Note that: a) the claimed "overhead air bag" of claims 2, 30, 41, 49 and 59 is not structurally different from the air bag used in the method of Lunt; therefore, it does not patentably distinguish the claimed invention from the applied prior art. Furthermore, there is nothing that precludes the air bag of Lunt to be used as an overhead air bag; and b) tucking is

taken as pulling up into a fold (Webster's Collegiate Dictionary) and thus tucking is considered to be the same as folding.

With respect to Claims 7, 8, 15, 16, 25, 26, 34, 35, 42, 43, 52, 53, 62 and 63, the step of contraction folding in the method of Lunt includes rolling the air bag on the windshield face (62) from the end of the air bag toward the throat of the air bag (FIG. 17).

With respect to Claims 10, 18, 28, 37, 45, 55 and 65, the step of contraction folding in the method of Lunt includes accordion folding the air bag on the windshield face (62) from the end of the air bag toward the throat of the air bag (FIG. 17).

With respect to Claims 11, 12, 19, 20, 38, 39, 46, 47, 56, 57, 66 and 67, the step of contraction folding in the method of Lunt includes accordion folding a portion of the air bag and wrap folding a remaining portion of the air bag and the folding is conducted toward the windshield face (62) (FIGS. 17-19).

6. Claims 1-7, 14, 15, 17, 22, 25, 27, 29-34, 36, 41, 42, 44, 49, 50-52, 54, 59, 61, 62 and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Webber (US 5,348,341).

With respect to Claims 1-3, 14, 22, 30, 31, 41, 49 and 59, Webber discloses a method of folding an air bag including the steps of: providing an air bag (10) having a throat (32), a head region (67), windshield face (24), occupant face (30), first (20) and second (22) lateral sides, and an end (14); flattening the windshield face (24) and the occupant face (30) of the air bag; folding the head region (67) inwardly (FIG. 9B); folding/tucking the first (20) and the second (22) lateral sides of the air bag inwardly by flattening the first and second lateral sides against a face of the air bag (FIG. 3); and contraction folding the air bag from the end (14) toward the throat (32).

(FIGS. 6A-8A). Note that: a) the claimed “overhead air bag” of claims 2, 30, 41, 49 and 59 is not structurally different from the air bag used in the method of Webber; therefore, it does not patentably distinguish the claimed invention from the applied prior art. Furthermore, there is nothing that precludes the air bag of Webber to be used as an overhead air bag; and b) tucking is taken as pulling up into a fold (Webster’s Collegiate Dictionary) and thus tucking is considered to be the same as folding.

With respect to Claims 4-6, 32, 33 and 50, the step of folding the first (20) and second (22) lateral sides in the method of Lunt includes flattening and overlapping the first and second lateral side against the occupant face (30) (FIG. 3); and flattening and overlapping the first (20) and the second (22) lateral sides against the windshield face (24) (FIG. 5).

With respect to Claims 7, 9, 15, 17, 25, 27, 34, 36, 42, 44, 52, 54, 62 and 64, the step of contraction folding in the method of Webber includes rolling the air bag from the end (14) toward the throat (32) and the rolling is conducted toward the occupant face (30) (FIGS. 6A-8A).

With respect to Claim 29, the step of contraction folding in the method of Webber is followed by the step of folding the head region (67) (col. 3, lines 39-42; FIG. 9B).

With respect to Claims 51, 61, the step of folding the head region in the method of Webber includes flattening the head region against the windshield face (24) (col. 3, line 39-42; FIG. 9B).

7. Claims 1-68 are rejected under 35 U.S.C. 102(e) as being anticipated by Halford et al. (US 6,739,622).

With respect to Claims 1, 2, 14, 22, 30, 41, 49 and 59, Halford discloses a method of folding an air bag including the steps of: providing an air bag (10) having a throat (110), a head region (72), windshield face (50), occupant face (52), first (76) and second (78) lateral sides, and an end (74); flattening the windshield face (50) and the occupant face (52) of the air bag; folding the head region (72) inwardly (FIG. 9); folding/tucking the first (76) and the second (78) lateral sides of the air bag inwardly to a desired width (FIG. 16); and contraction folding the air bag from the end (74) toward the throat (110) (FIGS. 7-14). Note that: a) the claimed “overhead air bag” of claims 2, 30, 41, 49 and 59 is not structurally different from the air bag used in the method of Halford; therefore, it does not patentably distinguish the claimed invention from the applied prior art. Furthermore, there is nothing that precludes the air bag of Halford to be used as an overhead air bag; b) tucking is taken as pulling up into a fold (Webster’s Collegiate Dictionary) and thus tucking is considered to be the same as folding; and c) the order in which the step of folding the first and second lateral sides and the step of contraction folding is not set forth in the claims, therefore, either of these steps can conducted before the other.

With respect to Claims 3-6 and 31-33, the step of folding the first (76) and second (78) lateral side in the method of Halford includes overlapping and flattening the first (76) and second (78) lateral sides against the windshield face (50) and the occupant face (52) (FIG. 16).

With respect to Claims 7, 9, 15, 17, 25, 27, 34, 36, 42, 44, 52, 54, 62 and 64, the step of contraction folding in the method of Halford includes rolling the air bag from the end (74) toward the throat (110) and the rolling is conducted toward the occupant face (52) (FIGS. 8-10).

With respect to Claims 8, 16, 26, 35, 43, 53 and 63, Halford teaches that the contraction folding of the air bag (10) can be conducted either toward the occupant face (52) in one

embodiment or toward the windshield face (50) in another embodiment (col.9, line 38-col. 11, line 11; FIGS. 25-31).

With respect to Claims 10, 18, 28, 37, 45, 55 and 65, the step of contraction folding in the method of Halford includes accordion folding the air bag on the occupant face (52) from the end of the air bag toward the throat of the air bag (FIGS.8, 11-13).

With respect to Claims 11, 13, 19, 21, 38, 40, 46, 48, 56, 58, 66 and 68, the step of contraction folding in the method of Halford includes accordion folding a portion of the air bag and wrap folding a remaining portion of the air bag and the folding is conducted toward the occupant face (52) (FIGS. 8-10).

With respect to Claims 12, 20, 39, 47, 57 and 67, Halford teaches that the contraction folding of the air bag (10) can be conducted either toward the occupant face (52) in one embodiment or toward the windshield face (50) in another embodiment (col.9, line 38-col. 11, line 11; FIGS. 25-31).

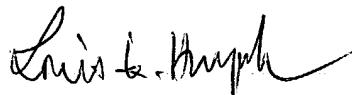
With respect to Claim 23, the step of folding the first (76) and second (78) lateral sides is preceded by the step of folding the head region (72) (FIG. 9).

With respect to Claims 24, 50, 51, 60 and 61, the step of folding the head region (72) in the method of Halford includes flattening the head region (72) against the windshield face (50) (FIG. 9); however, Halford also teaches that the folding of the head region (72) can be conducted either toward the occupant face (52) in one embodiment or toward the windshield face (50) in another embodiment (col.9, line 38-col. 11, line 11; FIG. 31).

With respect to Claim 29, the step of contraction folding in the method of Halford is followed by the step of folding the head region (72) about the contraction folded portion of the air bag (FIGS. 13-14).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure has been cited on form PTO-892 along with the applied prior art.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is (571) 272-4462. The examiner can normally be reached on M-F from 9:30AM to 5:00PM.
10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Louis K. Huynh  
Patent Examiner  
Art Unit 3721

November 22, 2004